

## **REMARKS**

Claims 1-17 are pending in this application. Claims 15 through 17 have been newly added.

### **I. REJECTION OF CLAIMS (35 U.S.C. § 103)**

According to MPEP 706.02(j), the following establishes a *prima facie* case of obviousness under 35 U.S.C. §103:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

**A. Claims 1, 4, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somani et al (US 6,718,173) in view of Watson et al (US 6,212,382). The Applicant respectfully traverses.**

1. Regarding claims 1, 4, 6 and 9, the Examiner stated that Somani teaches a wireless network system capable of tracking a location of a mobile station (see Abstract) comprising: a visitor location register in which location information relating to a wireless network location of a mobile station is stored (see column 1, lines 11-25 and column 1, lines 64-67), and a base station controller storing location information relating to a wireless network location of a mobile station in said visitor location register when the mobile station registers its location with said wireless network (see column 1, lines 35-52, "BSC" and column 1, lines 64-67).

However, as seen in col. 1, lines 45-52 and lines 64-67, it is not the BSC 18 that stores the location information in the location register, but it is clearly the MSC (mobile switching center) 20 that stores the information in the VLR 28.

2. The Examiner goes on to state that Somani teaches confirming a location of the mobile station and updating the location information stored in said visitor location register when the mobile station keeps up an idle state during a certain period (column 1, lines 35-52, see "a predetermined time period has elapsed") and (see column 4, lines 59-64).

However, nothing is stated concerning the predetermined time period elapsing in col. 1, but

the abstract does state, “if a location update processor does not receive a message from a global database server acknowledging receipt by the global database server of a location update message after a predetermined retry interval has elapsed since the location update message was sent by the location update processor, the location update processor sends a location update retry message after each predetermined retry interval elapses until the location update processor receives an acknowledgement message from the global database server.”

Therefore, Somani is only teaching of resending location update message after a predetermined retry interval only. There is no specific teaching that there is a confirmation of the location of the mobile station and updating the location information stored *when the mobile station keeps up an idle state during* a certain period. It is not just the certain period but that it is the period of time when specifically the mobile station keeps up an idle state.

In addition, the Examiner is connecting the teaching of the background art of Somani in col. 1 with the teachings of Somani in col. 4. However, on cols 1-4 of the background section, Somani clearly states that there is problems with the background art and that there is a need for an improved location information recovery system and method since the background is providing a proper solution to the problems. According to MPEP §2145, “It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). This background portion of Somani cannot be just ignored because according to MPEP §2141.02, “A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851

(1984).” Clearly, Somani is then also teaching away from combining the teachings of col. 1, line 7 to col. 4, line 32 of the background with the teachings of Somani in the remaining portion of the specification.

3. The Examiner admits that Somani does not specifically disclose confirming a location of the mobile station by dummy paging, but states that Watson teaches confirming a location of the mobile station by dummy paging (see column 2, lines 45-49).

However, Watson sends a brief signaling message to inform the base station of its location so that it can be paged for location update is not a dummy paging. The brief signaling message to inform of its location is not a confirmation but an information and it is not a dummy paging. The signal is coming from the mobile station to inform of its own location instead of the base station controller confirming the location of the mobile station by dummy paging as claimed in the present invention. The brief signaling from the mobile station cannot be a dummy paging as it initiates an actual paging *if* incoming calls arrive.

4. The motivation to combine Watson to Somani is not clear and particular. The Examiner stated that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Watson into the system of Somani in order to provide a method for handover in a multicellular environment including an overlay and underlay of macrocells and microcells (see Watson, column 1, lines 5-10). “Combining prior art references

without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999). The showing must be "clear and particular" without broad generalized conclusory statements. *Id.* There must be specific statements showing the scope of the suggestion, teaching, or motivation to combine the prior art references. *Id.* at 1000. There must be an explanation to what specific understanding or technical principle would have suggested the combination of references. *Id.* However, the Examiner is simply stating the first claim of Somani without any relevance or particularity to the present invention and therefore, the motivation is not clear and particular as needed for a motivation. Simply taking any benefit or claim in a reference, is not clear and particular.

**B. Claims 2, 3, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somani et al (US 6,718,173) in view of Watson et al (US 6,212,382) and further in view of Stephens (US 6,256,503) and Fitch et al (US 6,424,840). The Applicant respectfully traverses.**

1. First, the remarks above concerning claims 1, 4, 6 and 9 apply to show the lack of obviousness.

2 . Regarding claims 2, 3, 8 and 12, the Examiner stated that Somani teaches a private wireless network system capable of tracking a location of a mobile station (see Abstract)

comprising: at least one repeater dispersedly installed in sector zones of a private base transceiver station; a visitor location register in which location information relating to a private wireless network location of a mobile station is stored (see column 1, lines 11-25 and column 1, lines 64-67, see "VLR").

a. However, Somani does not teach a repeater as claimed. On page 10 of paper no. 11022005, the Examiner states that the base station reads on applicants repeater as seen in applicants figure 1, repeater R. However, it is well known that a repeater is generally a device that receives a radio signal, amplifies it, then retransmits it in a new direction, used to extend the range of a base station's signals, thus expanding coverage without the expense of added base stations, and repeaters are often used within buildings, tunnels, urban canyons, or other difficult terrain. The specification in paragraph 29 states that the pBTS 108 is connected to a plurality of repeaters R that are dispersedly installed in its own sector zones. It does not state base stations. If the Applicant meant to state base station, then it would say, "base station."

In addition, even if it is argued that the repeater is special type of base station, then simply showing of a base station still does not teach or suggest a repeater. According to MPEP 706.02(j), the references must teach or suggest *all* the claim limitations. If a repeater is claimed, then a repeater must be shown by the Examiner using references and not just the Applicant's own invention.

The Examiner cannot use as a reason for rejection, the Applicant's own disclosure. Otherwise, the Examiner is simply taking the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999).

b. Furthermore, Somani does not teach or suggest the repeater dispersedly installed in sector zones of a private base transceiver station. As mentioned in col. 1 of the background art, is instead teaching that it is in fact the BSC that is located within the location area 24 of the MSC 20. The mobile switching center is not the private base transceiver station and instead it is the base station controllers that are located in area 24. In addition, it Somani never states that the BSC is the private BSC. Moreover, it doesn't even state that the BSC 18 is dispersedly installed in certain sector zones. If the Examiner is referring to the cells of figure 1, it still does not disclose of any base stations.

c. It is not clear entirely of what particular part the Examiner is relying on. As mentioned in 37CFR §1.104 (c)(2), "When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable." The particular parts relied upon were not mentioned and therefore, the Examiner is required to provide such particular parts for a complete office action.

3. Somani fails to teach or suggest confirming and updating the location information when the mobile station keeps up an idle state during a certain period. The Examiner points to col. 4, lines 59-64, but it only states that when the location update messages are not received, there is a transmission of the location update retry messages until the messages are received which is not the same as updating and confirming when there is an idle state for a time. The actual updating and confirming is not done but the update messages are sent until they are received by the mobile station.

4. The Examiner admits that the combination of Somani and Watson does not specifically disclose a server inquiring about the location information of the mobile station stored in said visitor location register, but that Stephens teaches a server inquiring about the location information of the mobile station stored in said visitor location register (see column 13, lines 40-48).

However, looking at col. 13, lines 40-48 of Stephens, Stephens teaches a home location register that provides subscription information for querying service machine and requesting the visitor location register, in association with the mobile switching center to provide the location of the mobile station. However, specifically no server specifically is making an inquiry in col. 13. A querying service machine is not specifically a server.

5. The Examiner admits that the combination of Somani, Watson and Stephens does not specifically disclose the location information including at least one of a private base transceiver station number, a sector number and a repeater number, but that Fitch teaches the location information includes at least one of a base transceiver station number, a sector number and a repeater number (see column 7, lines 8-10).

a. However, the teaching is specifically only that the location information may include a cell or sector identifier only.

First, it is only one or the other being included and then the cell or sector identifier does not teach all three items claimed.

Secondly, the teaching in Fitch does not specifically relate to the repeater number and private



base transceiver station number. The present claim separately mentions sector number from the pBTS number and repeater number. Therefore, the cell number is left in Fitch. The cell identifier cannot teach both specifically and it does not specifically teach either the pBTS or the repeater.

b. The Examiner on page 10 of paper no. 11022005 argues that the cells identifier includes the base station number since the cell includes the base station and that the Fitch base station reads on the repeater.

First, as shown above, the repeater is claimed and not the base station. Moreover, even if it argued that the repeater is a specialized form of base station, still then the repeater must be specifically taught and not just by a base station.

Secondly, the cells are being referred to and not even the base stations. The identifier is not relating to the base station but the cell itself.

Thirdly, inherency is being improperly used. Inherency relates generally to a 102 rejection. Furthermore, even if inherency is used in a 103 rejection, the Examiner has failed in the Examiner's burden requirements under the requirements of inherency under MPEP §2112. According to MPEP§2112, "A rejection under 35 U.S.C. 102/103 can be made when the prior art product seems to be identical except that the prior art is silent as to an inherent characteristic." Here, the prior art is clearly not identical as shown above.

Inherent description is also not pertinent in this discussion, because inherency is involved only where a minor, well-known feature is lacking. Further the CCPA has added that "inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing

*may* result from a given set of circumstances is not sufficient.” *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). As mentioned in the claim, such a limitation is not just a minor point.

Therefore, also by stating that a BSC may be numbered since the cell is numbered is not a proper reason for rejection.

6. Regarding claim 13, the Examiner states that Somani further teaches transmitting the location information received from said private base station controller to the client; and receiving the location information from said server and providing a user with a location and state of the specific mobile station according to the received location information (see column 1, lines 11-25 and column 1, lines 64-67).

Somani teaches of providing location to the mobiles 16, but does not specifically state that the user is actually informed. Information can be provided to mobile station without informing the user. Moreover, the information of the location is not received from the *private base station controller* to the client and then also receiving the location information from the server to provide the location for mobile station. Both scenarios are not taught or suggested as instead, only the mobile switching center. Instead in col. 1, lines 10-25, Somani only states that the mobiles send a location update message rather than as claimed. According to MPEP 706.02(j), all the limitations must taught or suggested and here not all or any are taught or suggested.

**C. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somani et al (US 6,718,173) in view of Watson et al (US 6,212,382) and further in view of Fitch et al (US 6,424,840). The Applicant respectfully traverses.**

1. Regarding claims 5 and 7, the Examiner admits that the combination of Somani and Watson does not specifically disclose the location information includes at least one of a base transceiver station number, a sector number and a repeater number.

However, as mentioned above, Fitch only mentions sector number *OR* cell number only and fails to teach both the repeater number and the base transceiver station number. Moreover, it would be improper to assume that repeater number is inherently taught by cell number as mentioned above.

**D. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somani et al (US 6,718,173) in view of Garceran et al (US 6,522,888) and Fitch et al (US 6,424,840) and further in view of Giniger et al (US 6,199,045). The Applicant respectfully traverses.**

1. Regarding claim 10, the Examiner admits that Somani does not specifically disclose periodically transmitting a message requesting an inquiry about a mobile station subscriber's state to a server, but that Garceran teaches periodically transmitting a message requesting an inquiry about a mobile station subscriber's state to a server (see column 3, lines 34-37).

However, specifically, the Garceran is teaching that the base station is making requests for the wireless units position and not a server.

2, The Examiner admits that the combination of Somani and Garceran does not specifically disclose the location information including a private base transceiver station number, a sector number and a repeater number with respect to the relevant mobile station, but states that Fitch teaches the location information including a private base transceiver station number, a sector number and a repeater number with respect to the relevant mobile station (see column 7, lines 8-10).

However, as shown above, Fitch only teaches sector number or cell number only and not the entire limitation as claimed.

3. The Examiner states that Giniger teaches requesting a private base station controller to inquire out location information stored in a visitor location register in response to the inquiry message, transmitting location information stored in a visitor location register to a server in response to the server's request (see column 11, lines 59-61, column 12, lines 32-38, the teaching of Giniger inherently teaches "a visitor location register" since the mobile unit 103 can roam from one network to another network and each network inherently includes "a visitor location register") and transmitting the location information received from said private base station controller to the client

and receiving the location information from said server and providing a user with a location and state of a mobile station according to the received location information (see Abstract), since the other references in the combination fail to make such a teaching.

a. However, inherency is improperly used to teach the visitor location register.

The Examiner must actually show the specific teaching or suggestion and not assumptions.

b. Moreover, Giniger only teaches of sending location information, there is no teaching or suggestion from where the location information is sent from. It can be from any number of places, but Giniger does not make any such teaching. The Federal Circuit has mentioned that “[t]he test for obviousness is not whether the features of one reference may be bodily incorporated into another reference...Rather, we look to see whether combined teachings render the claimed subject matter obvious.” *In re Wood*, 599 F.2d 1032, 202 USPQ 171, 174 (CCPA 1979) (citing *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549-50 (CCPA 1969); *In re Mapelsden*, 329 F.2d 321, 322, 141 USPQ 30, 32 (CCPA 1964). Therefore, one cannot just incorporate a portion from Giniger into the other references merely because in dissected form it contains a key word in a search. Giniger inherently teaches "a visitor location register" since the mobile unit 103 can roam from one network to another network and each network inherently includes "a visitor location register is fair amount of assumptions that are not actually taught or suggested.

c. Giniger does not teach or suggest transmitting the location information received from said private base station controller to the client and receiving the location information from said

server and providing a user with a location and state of a mobile station according to the received location information in the abstract or any portion of text in Giniger. The private base station controller is never mentioned and it is not provided to the client specifically and to the user specifically of the information from the server. The two sets are not taught as claimed. Giniger only mentions that the central site server 107 receives information of location from the mobile unit and then with the bidirectional connection sends response information only which includes about a point of interest to the mobile user and information about a topic of interest to the user. col. 22, lines 37-42. Thereby, the server is only providing content based information to the user when the user sends the location. Moreover, the Examiner admits that the other reference fails to make such a teaching and therefore, the combination fails to make such a teaching or suggestion of the limitations claimed.

d. Regarding claim 14, the Examiner states that the combination of Somani, Garceran, Fitch and Giniger further teaches transmitting location information stored in said visitor location register directly to the server, remote from the visitor location register, in response to the servers request (see Giniger, column 1, lines 59-61, column 12, lines 32-38, the teaching of Giniger inherently teaches "a visitor location register" since the mobile unit 103 can roam from one network to another network and each network inherently includes "a visitor location register").

However, Giniger never even mentions the VLR, therefore, one cannot assume that such an "inherent" VLR is also remote from the server and is sent directly to the server only. Also as mentioned above, the use of inherency is improper by the Examiner.

**E. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Somani et al (US 6,718,173) in view of Garceran et al (US 6,522,888) and Fitch et al (US 6,424,840) and further in view of Giniger et al (US 6,199,045) and Watson et al (US 6,212,382). The Applicant respectfully traverses.**

Regarding claim 11, the Examiner states that the combination of Somani, Garceran, Fitch and Giniger teaches confirming a location and state of a mobile station and updating its location information of said visitor location register when the relevant mobile station keeps up an idle state during a certain period, and then transmitting the updated location information to said server (see. Somani, column 1, lines 11-25 and column 1, lines 64-67, see "VLR").

However, as mentioned above in the remarks concerning claim 1, Somani does not teach of the confirmation as claimed. Furthermore, Somani does not teach of such transmission and update to the server as Somani relates to the mobile switching center.

The server of Giniger has not been resolved with the base station controller of Somani and the MSC of Somani. "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)." Therefore, looking at the entire references as a whole, the claimed combination is not taught or suggested.

As shown above in the remarks concerning claim 1, Watson fails to teach or suggest confirming a location of the mobile station by dummy paging.

## **II. Newly Added Claims**

Claims 15-17 are newly added and are supported by the entirety of the drawings and the related specification. Moreover, the references alone or in combination fail to teach or suggest all the claim limitations in claims 15-17. The references fail to teach or suggest the server being connected to the base station controller through a local area network and the plurality of repeaters being connected to the private base transceiver station, with the private base transceiver station being connected to the private base station controller; a client being informed of the location information from the server; with the client being connected to the server, the server not accommodating the communication link between mobile stations; and the client being connected to the server, the server being connected to the base station controller through a certain network and a plurality of repeaters being connected to the private base transceiver station, with the private base transceiver station being connected to the private base station controller.

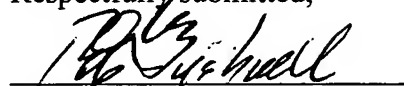
In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

No fee is incurred by this Amendment. Should there be a deficiency in payment, or should



other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. E. Bushnell", is written over a horizontal line.

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